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## Program Management Strategy for a VE/VA Program

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### ABSTRACT

We manage a VE/VA program in a large industrial organization in the U.S. Department of Defense. We restructured our program by integrating VE/VA activities: training, studies, metrics, technical support, and VE/VA personnel development - all are now managed in an integrated program basis. Several actions proved critical to accomplishing our integration objective: we developed a closer working relationships with our installation VE/VA Program Managers; we shortened VE/VA classroom time; we expanded pre- and post-course communication with trainees; we use more live projects in training; and we tied value improvements directly to VE/VA marketing efforts. Our program management innovations could be used by many other organizations to grow a VE/VA program.

### INTRODUCTION

We manage a VE/VA program in a large industrial organization in the U.S. Department of Defense. We

save millions of dollars each year through the use of VE/VA - but we knew we could do better. We examined our program and made some important changes to make it better. We believe other organizations can learn from our experience.

### RESTRUCTURING

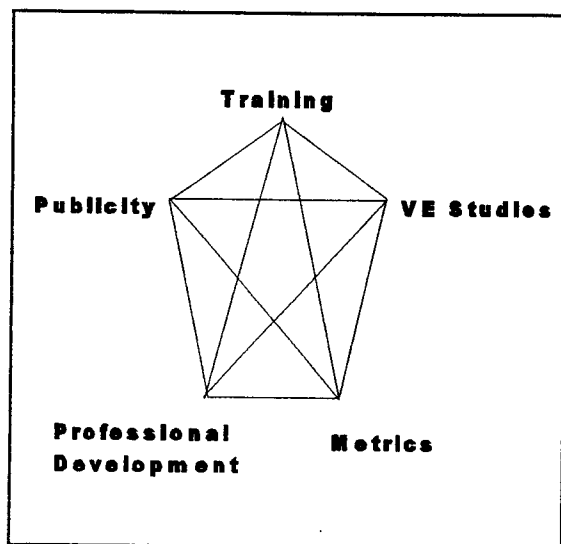
We restructured our program to improve our program integration.

Our objective is to make VE/VA part of the everyday business of our installations. To accomplish this objective, we restructured our program to allow management of our efforts on an integrated basis, where accomplishments in one area of the program contribute to and leverage our efforts in another area of our VE program. Specifically, in short, we:

- Integrated training with VE studies;
- Integrated study efforts with our VE program

publicity and marketing initiatives;

- Integrated our publicity and marketing efforts with our program reporting and management (economic analysis, awards);
- And finally, we integrated our program reporting and management to the continued professional development of our headquarters VE staff.



**Figure 1** - The five dynamic elements of VE Program management integration.

These five dynamic elements - training, studies, publicity, metrics, and professional development, are fully integrated. Action on any one of these elements are managed to leverage and contribute to the other four elements.

Program integration is easy to say, and easy to advocate. In practice, it requires planning, taking risks, and the willingness to be flexible.

Similarly, the process of program integration can be described in a few sweeping statements. In practice, restructuring a program is accomplished one decision at a time, one day at a time, with dozens of small and large decisions made every day. Our integration strategy keeps us consistent.

### THE FIVE DYNAMIC ELEMENTS

**Studies** - We facilitate and lead studies as an integral part of our training. This feature is critical to our program. Formerly, we provided most of our training without

conducting what we call "live projects". We conducted a considerable amount of training, but we saw too few true VE studies resulting from or otherwise attributable to the training.

Today, our core course is the Principles of Value Engineering, a three day course (discussed in more detail below). The core of the course (in turn) is the live study part of the course, which takes more than two of the three days. When possible, we work with trainees prior to the class so we understand the nature of the study. We assist trainees in identifying what information they need to have to conduct the study, and we begin identifying which available analytic tools would best contribute to the conduct of the study. During the instructional/lecture part of the course, we target the course material to the studies, and note for trainees where they may want to pay particular attention, and perhaps even illustrate the material with a sample application to the study subject.

We - the VE professionals in the organization - work with trainees on their studies. We facilitate, lead, or serve on the team, depending on the nature of the study. In most cases, we complete more than 80% of the study before the course is complete. We do not attempt to research every nickel and dime, or analyze every nut and bolt, in the time allotted. We try to take the trainees through the steps of the VE Job Plan on an accelerated basis. Trainees can refine data and analysis after we have departed, but we need to be there to guide them through the steps and analytic process so they can understand the process to the point where they can continue working the study on their own. We remain available to trainees via phone, e-mail, and fax, to assist them in the conduct of the study.

We request the opportunity to report to the installation's management before we leave. This is an excellent opportunity to publicize the program, confirm and solidify management support of the program, and increase the opportunity for additional VE training and studies at the installation in the future.

We provide the program context that motivates and encourages installation VE managers to conduct/sponsor VE studies.

We work on VE studies with installation staff, headquarters staff, and contractor staff. Studies are the engine that drives our program. Studies yield results that lend credence to training, publicity, metrics, and develop our VE staff.

**Training** - We offer, through our staff, 7 courses in VE.

- Principles of Value Engineering. Three days.
- Value Engineering Program Manager/Coordinator Workshop. One day.
- Value Engineering Program Executive Overview. Two hours.
- Contractual Value Engineering Incentives. One day.
- Functional Analysis System Technique. Two days.
- MOD 1 (SAVE Certified). Five days.
- MOD 2 (SAVE Certified). Three days.

Each of these courses compliments our other program management activities. The three day Principles of Value Engineering is closely integrated with our studies program. The VEPM/Coordinator workshop promotes professional development of our VE staff, and increases the opportunities for training, studies, and publicity. The VEPEO course (briefing), also increases our studies and training opportunities, and provides the opportunity to report on our accomplishments.

Publicity - We publish and produce a number of items promoting the use of VE.

We publish and distribute a quarterly command VE newsletter titled "VE Today". The newsletter is produced by VE staff, with articles ranging from short, one-paragraph announcements, to more lengthy articles about VE analytic methods. The typical newsletter is 4-7 pages, printed double-sided. We distribute over 250 copies. The newsletter allows us to update interested organizations about VE activities and accomplishments.

We publish an annual IOC VE Accomplishments booklet, which describes to readers noteworthy VE accomplishments over the last year. This is also distributed throughout the organization, and distributed in training courses, and other venues, where possible.

We produce VE displays for use at meetings, and for use at our installations. Displays include 2 full size stand alone commercial displays, and several desk-top displays.

We have a Web site which provides information about our program.

We produce tri-fold pamphlets containing information about the command program, and we produce pamphlets

for our installation VEMs, for their distribution. Pamphlets are distributed with our displays, and in other gatherings, where possible.

We distribute other VE publications where appropriate.

We encourage, and directly support, annual "VE Week" activities at our installations. We try to combine installation newspaper articles about VE with a training/studies effort, with an awards luncheon, where awards for VE studies are presented. We try to include a display, and pamphlet distribution, with the "VE Week" activity.

The main ingredients in our publicity material are the results of our studies, which typically are the result of our training, which we arrange, partially, through our publicity efforts.

Metrics - If you don't measure it, you don't mean it. We record and report on our program management activities.

We often find our installations working on some excellent value improving activities. Our program can help installations capture maximum savings by using the VE analytic methodology. Equally important, our program metrics capture and facilitate validation of the good efforts of installation staff - efforts that too often go unrecognized due to lack of reporting channels, and lack of guidance regarding what can be counted as savings, and where/how to report it. The VE program provides definitions, metrics, and lines of communication.

The metrics offered by our VE Program is one of the most underrated elements of our program, but good metrics are essential to our success.

Reporting and recording results provides the documented record we use in our publicity. If the results are documented, they are auditable. If they are auditable, they must be valid results. In order to be judged valid, we must publish (in regulations and in our annual VE plan), criteria describing how to account for costs, how to calculate savings, how and where to report savings, and how to document savings.

If you don't measure it, you don't mean it. We mean it, and we measure it.

Professional Development - Professional development involves two distinct categories of staff.

One category is the full-time (or majority time) VE professional.

We work diligently to ensure the professional VE staff in the command have the knowledge, skills, and abilities required to provide the VE expertise required.

Every class we teach, and every study in which we participate, increases our experience and hones our skills. In addition, all staff participate in planned developmental activities, such as improving briefing skills.

Many of our full-time VE staff are close to completing the requirements for certification as value specialists. Some on our staff have already earned that designation.

Without capable professionals, we would not have a program. As we gain experience, we get better. As we get better, our program becomes more effective.

The second category of command VE staff is the VE support personnel, typically our installation Value Engineering Managers.

This staff is support in the sense they are not full-time on VE. Most of our installation staff have received training in VE beyond the basics, and are fully capable of leading VE studies. While we would like to see full-time VE professionals at our installations, the reality we deal with is we have installation VEMs who spend anywhere between 10-35% of their time on VE.

Our program is structured to maximize this critical resource.

We provide recognition to each VEM when that installation completes a successful year as VEM, with success being defined as exceeding the installation VE savings goal. When installation VEMs work to implement more than the basic VE program (additional training for installation staff, savings well beyond their goal, an active VE studies program outside VE training), they are recognized for the effort.

We hold an annual VE workshop, where the command VE community (headquarters, installations, and contractor staff who work in VE) gather to discuss the state of the program, to voice and resolve program management problems, and learn new approaches to VE analysis.

Lastly, we work closely and directly to assist and facilitate the installation VEM in managing his/her program. We produce publicity materials at request, we providing training at request, and we provide study leadership/facilitating capacity at request. We work with installation VEMs to see that these requests are made in the course of the annual VE Plan, but it is not required

that requests for assistance be included in the plan.

### THREE CONTEXT ELEMENTS

The five dynamic elements of our VE program integration strategy can be used by most organizations, even small VE/VA programs.

However, more is needed for successful program development, growth, and execution. We have found our program works best when we consistently and consciously account for three program context elements: program planning, management support, and customer focus.

Like the five dynamic elements, these elements complement each other - thorough and successful action in one of these elements will facilitate success in the other two elements.

Annual VE Master Plan - Have an annual plan approved by management. The plan, to be effective, must include some directed, measurable, actions. We recommend this take the form of VE savings goals for line and staff organizations.

The plan should describe your integrated program structure, and describe how interested organizations/individuals fit into that structure. They are charged with producing VE savings, and your plan should show them how to accomplish those savings using your VE program management structure.

Customer Focus - Management will (rightly) want to know how VE will help the organization. The lifeblood of any organization are that organizations' customers. We conduct Target of Opportunity Panels with our customers to identify customer wants and needs, and we incorporate this information in our VE training and studies process, as well as in our annual VE plan.

Target of Opportunity Panels (TOPs) is a process we have borrowed from Ted Fowler. In our organization, we use the panel process to identify customer needs. We have also adapted the process, and we use it to work with installation staff to identify promising topics for VE studies.

This latter process has proven extremely successful. When we conclude a TOP, we do not lack for study topics, and the staff that identified the study topics are generally enthusiastic about conducting the study, so we don't lack study participants.

Management Support - Show management that:

Your customers will benefit from increased value;

You can deliver increased value;

Employees want to serve on study teams;

And show you have the integrated program structure to manage the process.

Show these things, and you should be able to gain management support. Document this support through the annual plan.

### SUMMARY

Our objective is to make VE/VA part of the everyday business of our organization. To accomplish this, we have taken concrete steps to manage this dynamic, evolving process as an integrated program. As this is a dynamic, evolving process, we have structured our program to as a dynamic, integrated program where key program elements (studies, training, publicity, metrics, and professional development) are managed so they are mutually reinforcing – where actions in one area leverage and compliment efforts in ALL other areas.

The program management is conducted in the context of three additional key elements essential to success – customer focus, management support, and an effective program management planning process.

As stated, program integration is easy to say, harder to do. We do it one day at a time, one action at a time, and it is all too easy not to see the forest for the trees. A conscious, explicit, and integrated program management strategy helps guide us through the dozens of daily decisions in a manner which enables us to keep our focus, and maximize our efforts to increase value.